

How to evaluate new inventions and technology

What should you charge for the invention?

Pacyinz Lyfoung:

This is Pacyinz Lyfoung, from Public Interest Intellectual Property Advisors (known as PIIPA). In this segment, we will look at what to charge for an invention.

First of all, we'll look at basic issues.

What to charge for an invention will depend on whether:

The licensor is a non-profit institution as opposed to a for-profit company.
 A general rule will also be that there should not be a single lump sum payment.
 It is not necessary to calculate the full worth of the invention at the time of a technology transfer: license agreements are actually intended to share the risks of uncertainty.

When looking at what is a reasonable return, several factors will be considered:

- The cost of developing the technology.
- The cost of manufacturing.
- The market adoption cycle.
- And the ultimate market size.

So, when negotiating a conventional licensing agreement with an existing company, there are several fees that can be considered:

The first thing is a license issue fee, which is a negotiated amount payable at the time of execution of a license agreement.
 Then, it should also include license maintenance fees, which are annual fees that are usually creditable against available royalties; they also function as minimum royalties.
 The patent cost reimbursement is usually required by universities.
 Another type of fee are milestone fees: When the technology is very risky, milestones validate its potential. Examples of milestones would be approval for clinical testing or regulatory approval for sale.
 Finally, conventional licensing agreement would involve running royalties, which are usually a percentage of sales, when a major value is expected but is contingent upon the technology's success and market acceptance.

In licensing agreements with a spin-off company...

All of the previous five types of fees and payments would also be involved. However in addition, there would also be opportunities for:
 Shares of stocks and equity in the company.

It should be noted that those types of shares or stocks, or equity in the company may or may not be a source of return. For example, there may not be much value in those types of assets if there is an economic downturn

Those types of assets are also the riskiest component for the institution.

Finally, if both royalties and stocks are taken, they will be lower than if only one of the two were selected.

The factors affecting the amount of equity for the licensor are several. They consist of:

The importance of the technology to the final product.

The type of product.

The uniqueness of the technology and final product.

The typical profitability of that type of product.

Whether the IP is the key IP for the company or only a small piece of its holdings.

The strength and breadth of the IP.

Whether the IP includes only present patent rights or also proprietary know-how or also a pipeline of future technology and patents.

Whether the company will have to license blocking patents from third parties.

The state of development of the technology.

How much and how long it will take to develop it.

The cost of development in the country in which the company resides

The state of the economy. For example, the stock market and the investment environment in both the country of origin and country of the licensee

And finally, the negotiating skills of the research institution.

So... what are the numbers when looking at what to charge for an invention?

There are no typical numbers as there are no typical deals.

Evaluating and pricing early technology is more of an art than a science.

Success requires general knowledge of and experience with

a) product development, manufacture and markets; and

b) pricing for comparable technologies

It is better to conclude a deal with a company that will competently develop the product than to wait for the perfect deal. The public benefit occurs when the product is brought to market.

However, we can look at some examples of MIT numbers dating back to 2007.

For conventional licences, with existing companies, MIT has charged:

Between \$10 and \$200,000 for the licence issue fee.

Between \$20 to \$200,000 for the annual licence fee, which is the minimum royalty fee.

For milestone fees, it has charged between \$50,000 to \$1M – the higher number being for major drugs.

For running royalties, it has typically charged between 0.5 to 0.7%. Running royalties are lower for commodity products, higher for non-commodity products, software and composition of matter, as well as patents on drugs

For non-conventional licences, with a spin-off company, assuming that there are equity shares and assuming that the investment is \$1 million:

The venture investor would get 33%.

The research institution, if it contributes IP only, would get between 5 and 7%.

If research institution does some extensive incubation, it could get between 10 to 15%.

Typically, the research institution total could be between 10% and 22%.

There would also be employee stock options in a pool, which would probably be around 20%.

The share of a foundation entrepreneurial team would typically get between 25 to 32%. Unless no incubation by the research institute. In that case, the foundation entrepreneurial team within the spin-off company could get between 40 to 50%.